



NORLITE, LLC

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June 19, 2013

Ms. Nancy Baker
Deputy Regional Permit Administrator
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014

RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng
Air Compliance Branch
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedance Report
Kiln 1: 06/04/13- 06/19/13
Kiln 2: 06/04/13- 06/19/13

Dear Sirs:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite, LLC (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 06/04/13 thru 06/19/13. The attached document explains each of the "malfunctions" for Kiln One and Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the Scrubber pH monitor. A majority of the pH Span cutoffs were caused by partially plugging of the sample loop in the scrubber system. The material causing the partial blockage was soda ash solids and then baghouse dust which suggested a problem in the baghouse system. At approximately the same timeframe, the kiln developed an overall reduced system draft which affected the frontend differential kiln pressure and Venturi differential pressure systems. The kiln was brought down for investigation and repairs on 06/18/13. The investigation did find several baghouse bags to be damaged which explains the baghouse dust in the scrubber system. An investigation as to what caused the damage to the bags as well as the reduced system draft is still underway.

Norlite has been working with the Department to install a new optical flow technology to monitor stack gas flow rate. A test unit has been installed on Kiln 1 and RATA tested to obtain additional information to be used in future calculations. Norlite is hopeful to have the unit in Kiln 1 completely certified and approved for operation by August of 2013. After final approval is given for the unit on Kiln 1, Norlite will install a unit on Kiln 2 with an expedited schedule for completion. This project should eliminate all future stack gas span cutoffs.

Norlite has also been working with the Department to improve LGF delivery and handling at the kilns. The Department has conditionally approved Norlite's plan to remove minimum LLGF Line Pressure, allow a positive displacement pump to be used for fuel flow control, and allow the use of a recirculation line for use during times when off LGF. The Department has requested a six month study be conducted without a minimum LGF Line Pressure requirement. The study has been underway since May 01, 2103. Norlite is continuing to search for a positive displacement pump which will allow variable speed control, have tight pump tolerance, and have suitable reliability for long term use. Norlite will submit a final report to the

DCL: 2410



NORLITE, LLC

Department in December 2013 detailing the findings from the study without a minimum LGF Line Pressure. Norlite is hopeful to have a positive displacement pump in place, approval to remove the LGF Line Pressure requirement, and the use of the recirculation loop by early 2014. This project should allow for improved fuel delivery at the kilns which should result in reduced frontend kin pressure and rear chamber pressure cutoffs.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tom.vanvranken@tradebe.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken
Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments
James Lansing, NYSDEC – CO w/attachments
Joseph Hadersbeck, NYSDEC – R4w/attachments
Jim Quinn, NYSDEC – R4 w/attachments
Tita LaGrimas – Tradebe



NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
06/04/13 - 06/19/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
6/4/2013	16:19:39	6/4/2013	16:20:35	0:00:56	103	Malfunction	The Kiln Operator Was Attempting to Establish Fuel Feed For the First Time Since the Shutdown and Encountered A Pocket of Air In the Line Which Caused a Faulty Reading on the MicroMotion	LGF Flow	Span	The Kiln Operator Bled the Line to Remove Additional Air Pockets
6/6/2013	8:27:37	6/6/2013	8:28:13	0:00:36	104	Malfunction	The pH Sample Loop Was Partially Plugged Which Caused a Decrease in Scrubber Water Flow. The Reduced Flow Caused the pH Probe to Fault to a High pH Reading	Scrubber pH	Span	The Scrubber Filter Basket Was Clean to Allow Sufficient Water Flow to the pH Probes
6/8/2013	11:49:18	6/8/2013	11:49:43	0:00:25	105	Malfunction	Significant Wind Gusts Out of the West Contributed To Decreasing the Overall Differential Frontend Kiln Pressure While the Kiln Was Experiencing Reduced System Draft	Front Kiln Pressure, 1 Second Delay	Opl	Adjusted Fuel Flow and LGF Line Pressure
6/8/2013	11:49:48	6/8/2013	11:50:11	0:00:23	106	Malfunction	Significant Wind Gusts Out of the West Contributed To Decreasing the Overall Differential Frontend Kiln Pressure While the Kiln Was Experiencing Reduced System Draft	Front Kiln Pressure, 1 Second Delay	Opl	Adjusted the Barron and Cooler Fans to Increase the Differential Pressure
6/9/2013	3:20:46	6/9/2013	3:21:50	0:01:04	107	Malfunction	The pH Sample Loop Was Partially Plugged Which Caused a Decrease in Scrubber Water Flow. The Reduced Flow Caused the pH Probe to Fault to a High pH Reading	Scrubber pH	Span	The Soda Ash Solution Concentration Was Reduce to Help Reduce Build Up
6/9/2013	10:36:38	6/9/2013	10:37:14	0:00:36	108	Malfunction	Water From A Broken Sump Pump Line Carrying Spent Soda Ash Solution Was Entering the Scrubber Liquid Recycle Tank and Causing the pH To Rise Suddenly to Fault the pH Probe	Scrubber pH	Span	The Sump Was Shutoff and the Broken Line Repaired
6/9/2013	11:46:22	6/9/2013	11:52:57	0:06:35	109	Malfunction	Water From A Broken Sump Pump Line Carrying Spent Soda Ash Solution Was Entering the Scrubber Liquid Recycle Tank and Causing the pH To Rise Suddenly to Fault the pH Probe	Scrubber pH	Span	The Sump Was Shutoff and the Broken Line Repaired
6/10/2013	1:26:55	6/10/2013	1:42:10	0:15:15	110	Malfunction	After Rinsing Out the Mist Pad, Excess Water Allowed Water Droplets to Contact the Stack Gas Probe and Cause Erroneous Readings	Stack Gas Flow Rate	Span	The Trunnion Mechanic Turned Off the Mist Pad Rinse Water
6/13/2013	17:04:22	6/13/2013	17:06:47	0:02:25	111	Malfunction	The pH Probe Was Suspected to Have Fallen Out of Calibration	Scrubber pH	Span	I&E Recalibrated the pH Probe
6/13/2013	17:13:39	6/13/2013	17:15:04	0:01:25	112	Malfunction	The pH Sample Loop Was Found to Be Plugged With Soda Ash Solids and Baghouse Dust Which Affected the Scrubber Water Flow Into the Sample Loop	Scrubber pH	Span	The WWTP Mechanic Cleared the Sample Loop and Investigated the Baghouse Dust
6/15/2013	12:12:39	6/15/2013	12:13:23	0:00:44	113	Malfunction	The Kiln Developed A Reduced System Draft Which Reduced the Effectiveness of the Frontend Kiln Pressure System to Handle Minor Pressure Changes	Front Kiln Pressure, 1 Second Delay	Opl	The Kiln Was Brought Down for Inspection and Repair of the Baghouse and Scrubber Systems on 06/18/13
6/16/2013	2:56:31	6/16/2013	2:57:30	0:00:59	114	Malfunction	An Inspection of the Baghouse System on 06/18/13 Found Several Bags Damaged Which Contributed to the Scrubber pH Sample Loop Becoming Partially Plugged	Scrubber pH	Span	An Investigation as to the Cause of the Damaged Baghouse Bags Is Underway



NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
06/04/13 - 06/19/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
6/16/2013	11:18:10	6/16/2013	11:18:29	0:00:19	115	Malfunction	The Kiln Developed A Reduced System Draft Which Reduced the Effectiveness of the Frontend Kiln Pressure System to Handle Minor Pressure Changes	Front Kiln Pressure, 1 Second Delay	Opl	The Kiln Was Brought Down for Inspection and Repair of the Baghouse and Scrubber Systems on 06/18/13
6/17/2013	0:51:55	6/17/2013	0:53:55	0:02:00	116	Malfunction	The Kiln Developed A Reduced System Draft Which Reduced the Effectiveness of the Frontend Kiln Pressure System to Handle Minor Pressure Changes	Front Kiln Pressure, 1 Second Delay	Opl	The Kiln Was Brought Down for Inspection and Repair of the Baghouse and Scrubber Systems on 06/18/13
6/17/2013	1:03:46	6/17/2013	1:04:23	0:00:37	117	Malfunction	The Kiln Developed A Reduced System Draft Which Reduced the Effectiveness of the Frontend Kiln Pressure System to Handle Minor Pressure Changes	Front Kiln Pressure, 1 Second Delay	Opl	The Kiln Was Brought Down for Inspection and Repair of the Baghouse and Scrubber Systems on 06/18/13
6/17/2013	13:29:46	6/17/2013	13:30:37	0:00:51	118	Malfunction	An Inspection of the Baghouse System on 06/18/13 Found Several Bags Damaged Which Contributed to the Scrubber pH Sample Loop Becoming Partially Plugged	Scrubber pH	Span	An Investigation as to the Cause of the Damaged Baghouse Bags Is Underway



NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 2
06/04/13 - 06/19/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
6/6/2013	5:02:09	6/6/2013	5:20:30	0:18:21	79	Malfunction	Instantaneous Upper Instrument Setpoint Was Reached for LGF Flow Span Due to the End of the Burn Tank Being Reach and Causing A Fuel Surge	LGF Flow	Span	A Tank Switch to A Different Tank Was Made and Fuel Flow Re-established
6/8/2013	23:55:55	6/9/2013	0:03:32	0:07:36	80	Malfunction	The Mist Pad Rinse Water Flow Had Been Increased Help Rinse the Mist Pad of Soda Ash Solids Which Caused Water Droplets to Hit the Probe and Cause Erroneous Readings	Stack Gas Flow Rate	Span	The Mist Pad Water Flow Was Reduced
6/11/2013	10:51:31	6/11/2013	10:56:01	0:04:30	81	Malfunction	The Mist Pad Rinse Water Flow Had Been Increased Help Rinse the Mist Pad of Soda Ash Solids Which Caused Water Droplets to Hit the Probe and Cause Erroneous Readings	Stack Gas Flow Rate	Span	The Mist Pad Water Flow Was Reduced
6/15/2013	15:24:28	6/15/2013	16:30:36	1:06:08	82	Malfunction	The Natural Gas Pilot Went Out Which Caused A Loss of the Main Flame Which Caused the CO's to Rise	Carbon Monoxide	Opl	Re-established the Natural Gas Pilot and Stabilized the Kiln